

DOCUMENT RESUME

ED 178 576

TB 009 731

AUTHOR Lockheed, Marlaine E.; Stein, Sandra I.
TITLE The Status of Women's Research in Educational Publications. (Draft Copy).
PUB DATE Jul 79
NOTE 34p.; Paper presented at the Annual Midwestern Conference on Women and Education (3rd, Madison, WI, October, 1978)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Authors; *Educational Research; *Educational Trends; Federal Aid; *Females; Minority Groups; *Professional Recognition; *Scholarly Journals; Scientific Methodology; Sex Differences; Social Science Research; *Womens Education

IDENTIFIERS Womens Journals

ABSTRACT

Sex differences in the content and authorship of articles published in major educational, women's and minority journals from 1973-1977 were examined. In that five-year period, research related to women in education accounted for approximately 10% of the research published in four major educational research journals (American Educational Research Journal, Journal of Educational Psychology, Sociology of Education, and Journal of Educational Measurement); 24% of the research published in two women's journals (Sex Roles and Psychology of Women Quarterly); and 6% of the research published in two journals dealing with minority education (Journal of Negro Education and Bilingual Review). No increase in the relative number of articles related to women and education published from 1973 through 1977 was found. Articles authored by women (but not necessarily about women's education) accounted for 9%, 59% and 17% of the research published in educational, women's and minority journals, respectively. No increase in the relative numbers of articles authored or co-authored by women from 1973 through 1977 was found. (A discussion of the relationship between publications and the status of women in educational research is included). (Author/GDC)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED178576

(DRAFT COPY)
Comments welcomed

THE STATUS OF WOMEN'S RESEARCH IN EDUCATIONAL PUBLICATIONS

by

Marlaine E. Lockheed
Educational Testing Service

and

Sandra L. Stein
Rider College

July 1979

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Marlaine E. Lockheed

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC) AND
USERS OF THE ERIC SYSTEM."

Educational Testing Service
Princeton, New Jersey 08541

An expanded and revised version of a paper presented
at the Third Annual Midwestern Conference on Women
and Education, Madison, Wisconsin, October 1978

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT
OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY.

TM 009 731

The Status of Women's Research in Educational Publications

Marlaine E. Lockheed

Educational Testing Service, Princeton, N.J.

Sandra L. Stein

Rider College, Lawrenceville, N.J.

Running head: The Status of Women's Research

Abstract

Sex differences in the content and authorship of articles published in major educational, women's, and minority journals from 1973-1977 were examined. In that five-year period, research related to women in education accounted for approximately 10% of the research published in four major educational research journals, 24% of the research published in two women's journals, and 6% of the research published in two minority journals. No increase in the relative number of articles related to women and education published from 1973 through 1977 was found.

Articles authored by women accounted for 9%, 59%, and 17% of the research published in educational, women's, and minority journals, respectively. No increase in the relative numbers of articles authored or coauthored by women from 1973 through 1977 was found.

The relationship between publications and the status of women in educational research is discussed.

The Status of Women's Research in Educational Publications

Publication of scientific research is presumed to serve two important but distinct functions: to disseminate scientific knowledge about the research topic and to be a record of a scientist's productivity and, consequently, an objective criterion for allocating academic prestige. The publication of research in a prestigious, widely read journal that is sponsored by a professional association is a good indicator of the research topic's status, and the quantity of a researcher's publications in such journals is often an indicator of her or his scientific status. This is as true for research on women and education and for women educational researchers as it is for other sciences and scientists. By 1972 it was noted that educational research on women and girls was not widely available and that women educators were not advancing within the profession as rapidly as their male counterparts (Fishel & Pottker, 1977). That is, women's status in both areas was low.

Partly in response to a heightened awareness regarding the problems of women in education, the federal government took action intended to improve the status of educational research on women and to improve the status of women educational researchers. The dramatic increase of federal support for research and development related to women and education from FY 1973 to FY 1978 should have enhanced the status and hence increased the quantity of published research on women and education, which is broadly defined in this article to mean studies of women or girls in relationship to an educational context, studies of sex differences on academically related characteristics, studies of education's effects on women and girls, and studies of the social construction of gender as it

relates to educational problems. Increased funding may also have increased the probability that women researchers, presumed to have greater competence or interest vis-à-vis the topic, would publish articles in educational research journals.

At the same time, federal legislation regarding sex discrimination in education went into effect. This legislation should have increased the numbers and improved the status of women in educational research. The greater numbers of female doctoral students, female researchers, and female faculty at prestigious institutions should have increased the probability of female authored and coauthored articles being published.

There has been no investigation to date, however, regarding the status of women's research in education during the period of time in question. This paper provides new evidence regarding the status of women's research in education by examining the content and authorship of publications in research journals from 1973 through 1977.

A frequent criticism leveled at much research on women has been that minority women have been ignored. Despite the fact that federal legislation regarding racial discrimination in education exists, its effects have seldom been integrated with legislation regarding women; consequently, minority women in education have been doubly overlooked. In order to avoid this kind of discrimination, women's publications in research journals specifically dealing with minority education were examined.

From 1973 to 1978, several new journals specifically concerned with research on women were established. These journals may have siphoned off articles about women and education, and articles written by female authors and coauthors, which otherwise might have appeared in mainstream journals. Thus, these journals were included for comparison purposes.

The purpose of the present study was (1) to determine how many articles on women and education were published in the major education journals and in women's and minority journals in the five years from 1973 through 1977; (2) to determine how many of these articles were authored solely by women, solely by men, or coauthored by men and women; (3) to determine whether the percentage of articles on women and education in the major educational journals increased during that time; (4) to determine whether the percentage of articles authored or coauthored by women increased during that time; and (5) to determine whether, if an increase in articles on women and education occurred, women published articles on women and education more frequently than men did.

Publications on Women and Education

That the perspectives of women are largely absent from the scientific research domain is an issue that has been raised for decades (see Prescott, 1978, for a review). Although recent research suggests that the percentage of empirical studies dealing with men only have declined and that those dealing with women only have increased (Reardon & Prescott, 1977), it is still rather widely believed that research on women is less extensive than that on men, particularly in education. Yet, far from there being a dearth of research on women in education, there are many such studies. For example, Resources in Women's Educational Equity, Volume 1 (1976), abstracts 1,293 articles dealing with some topic relevant to women's educational equity, and Volume 2 (1977-78) abstracts another 2,127 articles. Of these articles, 927 appeared in journals abstracted by ERIC, and another 477 appeared in journals abstracted by either Psychological Abstracts or Sociological Abstracts.

Since most journals have high rejection rates (Entwistle, 1978; Babladelis, 1978; Seaton, 1975), more research on women in education must have been conducted than has been reported.

One reason for the recent interest in the topic of women and education may be the considerable increase in research and development funds that have been spent on women and education since 1972. A 1975 HEW document, entitled Focus on Women, listed the projects on women that were supported by the Education Department from 1973 through 1975 separately by agency and fiscal year. The total that was reported as spent on projects related to women by the USOE, for example, in FY 1973 amounted to slightly less than \$200,000 (Focus on Women, 1975). By 1978, an average of \$17,742,000 per year had been spent by the USOE on projects related to women's education for FY 77-78 and FY 78-79 (USOE Budget Presentations, 1978).

The three-year publication lag between the initial funding and the final publication of an educational research journal article (Garvey, Nelson, & Lin, 1970; Seaton, 1975) implies that dissemination of research results from increased federal spending related to women and education began in 1975 and should have increased through 1977. To reach a large audience, this research should be published in widely read and prestigious journals. Regrettably, few research journals in education have wide readership. For example, one study of superintendents found that educational practitioners reported obtaining their primary information on research from only the Phi Delta Kappan and the American Educational Research Journal (Fillos & Bailey, 1978). Although prestige of research journals in psychology has been studied extensively (Hohn & Fine, 1973;

Koulack & Kesselman, 1975; Mace & Warner, 1973), few ratings of education journals have been conducted. The most recent such rating found that among AERA members, the American Educational Research Journal, Review of Educational Research, Harvard Educational Review, Phi Delta Kappan, and the Journal of Educational Psychology were recently rated as the five most prestigious journals (Luce & Johnson, 1978). Thus, for research on women in education to have a wide audience, the results should be published in one of these journals, not all of which report empirical research (Stein & Weston, Note 1).

Publications and Women's Academic Status

There is a growing debate regarding the direction of the relationship between scientific productivity and career outcomes. Cross-sectional studies have been consistent in noting strong associations between such indicators of productivity as rates of journal article publication and indicators of career outcomes such as institutional prestige, academic rank, and salary and the assumption was made that productivity led to prestige, (Bayer & Astin, 1975; Persell, Note 2). Recent longitudinal research, however, provides evidence that productivity may be a consequence of academic prestige, rather than a determinant of it (Long, 1978). This finding has particular significance for the study of women's publication rates.

Sex differences in publication, noted in the aggregate (Cook-Freeman, 1977) and frequently cited to explain sex differences in career outcomes (Centra, 1974), all but disappear when institutional prestige and type are statistically controlled (Blackburn, Behymer, & Hall 1978). Aggregate sex differences in publication are accounted for

by the fact that women are more likely than men to be located at less-prestigious institutions, under conditions not favorable to publication (Blackburn et al., 1978). Minority women are even more likely than minority men or white women to be employed in less prestigious institutions (Availability Data: Minorities and Women, 1978).

Despite sex differences in academic employment, which can explain some differences in both publication rates and subsequent mobility, there is also recent evidence that the academic advancement process depends upon factors other than productivity and is not the same for women as for men (Brody & Kruse, Note 3).

Evidence for the importance of the prestige of the degree-granting institution and of the mentor on academic productivity is provided by Long (1978), who studied the careers of cohorts of male biochemists from 1957 to 1974. He found that the strongest predictors of the prestige of a scientist's first job were the prestige of the doctoral-granting institution and the prestige of his mentor, not the quantity of his predoctoral publications or citations. The mentor's prestige was the only predictor of the quantity of a scientist's publications in the three years following the award of the doctorate. The quantity of articles published three to six years after the doctorate were predicted by the prestige of the employing institution and the prestige of the doctoral-granting institution as well as by previous publications. Sex differences in either admissions to prestigious doctoral institutions or in obtaining prestigious mentors would account for subsequent sex differences in productivity.

Evidence that the status attainment process operates, in addition, differently for men than it does for women is supplied by two studies. Reskin (1976), in a study of chemists and postdoctoral fellowships, found sex interaction terms in both the predoctoral determinants and the occupational consequences of a postdoctoral fellowship award. Only for men did predoctoral accomplishments determine the prestige of the fellowship awarded that in turn determined the prestige of their subsequent employment. For both men and women, however, a prestigious postdoctoral fellowship contributed to subsequent publications. Persell (Note 2), in a study of educational researchers, found a stronger association between academic rewards and publications for women than for men. It is difficult to interpret these findings, but they suggest that male rewards and female rewards are determined by different factors. Nevertheless, for both men and women the attainment of academic rewards--acceptance into prestigious doctoral programs, sponsorship by distinguished mentors, and employment in research-oriented institutions--is associated with subsequent publications. Recent legislation regarding sex equity may have increased the likelihood of women having prestigious mentors, receiving doctorates from prestigious doctoral programs, and being employed by prestigious institutions.

In education, there is considerable evidence that women are comprising a larger percentage of both the doctorates awarded and of the membership in the professional association. Specifically, women accounted for 21.9% of the doctorates in education awarded between 1969-1972 (WEAL, Note 4), and for 34.7% of the doctorates awarded in 1977. Moreover, the percent of women receiving doctorates in the primary educational research fields of social foundations, psychology, and measurement and statistics

increased from 30.7% in 1973-74 to 38.9% in 1977. (Availability Data, Minorities and Women, 1978). Similarly, although women accounted for 26% of the AERA membership in 1974 (Lipman-Bluman, Stiver, Tickamyer, & Brainard, 1975), they accounted for 34.4% of the membership in 1978, and for 42% of the members joining between 1973-1977 (AERA Annual Report: 1977-1978, 1978). Overall, in 1974, they accounted for 40% of the educational research personnel (Tittle, Saario, & Denker, 1975).

If women in education have attained and therefore benefitted from increased access to prestigious doctoral programs, mentors, and postdoctoral institutions, their publication patterns should have changed. Thus, we should see an increase in the number of articles with both men and women as authors (reflecting the increased likelihood of a doctoral student being a woman, whereas, in general, the prestigious professoriate is male) and an increase in the number of articles written by women (reflecting the higher proportion of women engaged in educational research).

Method

In order to determine whether there had been an increase in the number of journal articles authored by women and related to women and education, we conducted an analysis of author sex and article content in educational research journals.

Selection of Journals

Three categories of journals were selected for review: (1) empirical research journals published by professional social science associations and highly rated by AERA members (Luce & Johnson, 1978), (2) empirical

research journals specifically concerned with women's issues, and (3) empirical research journals specifically concerned with minority issues.

To select journals for the first category, five criteria were used. The two content criteria were that the journal publish (1) primarily empirical, (2) articles on education. The three prestige criteria were that the journal (3) be published by the professional association, (4) in the social science fields that are heavily represented in AERA, and (5) be highly rated by AERA members. The primary professional association for educational researchers is the American Educational Research Association; the primary behavioral science affiliations for AERA members were, in 1976 and 1977, education (AERA), psychology (American Psychological Association), sociology (American Sociological Association), and statistics (National Council for Measurement and Evaluation), (AERA Annual Report: 1976-77, 1977; AERA Annual Report: 1977-78, 1978). With the exception of the AERA, each of these professional associations publishes only one empirical research journal dealing with education; for AERA, the American Educational Research Journal is the most prestigious journal (Luce & Johnson, 1978). For each of the other associations, the one journal dealing with education has also been highly rated by AERA members (Luce & Johnson, 1978). Therefore, the following journals were selected for analysis: American Educational Research Journal (AERA), Journal of Educational Psychology (APA), Sociology of Education (ASA), and Journal of Educational Measurement (NCME).

For the second and third categories, we again selected empirical social science journals. Two research journals dealing particularly with women (Sex Roles and Psychology of Women Quarterly), and two research

journals dealing with minority education (Journal of Negro Education and Bilingual Review) were chosen for comparison.

Definition of Terms

Manual and computer searches were employed to identify the number, content, and authorship of articles published by each journal for each volume year, 1973-1977. The following definitions and procedures were used:

Article. An article was defined as a publication that was empirically or theoretically based. Literature reviews and critiques were considered articles, but editorial prefaces, debates and rejoinders, remarks, comments, replies, and book reviews were excluded.

Women in Education. A three-tiered search strategy for identifying articles dealing with women and education was used. First, a computer search of the Current Index to Journals in Education for articles published in the eight journals between 1973 and 1977 was conducted, accessing all articles with the words woman, women, female, females, girl, girls, feminist, feminists, feminism, femininity, sex (excluding sex education), and any multiple word term beginning with sex or any word with sex as the root in either the title, abstract, or descriptors. Second, a manual review of the titles and abstracts of all the computer identified articles was conducted to eliminate those publications not meeting our definition of "article." Third, we included only those articles that met our definition of women and education, as specified earlier.

Sex of Authors. Sex was determined by personal knowledge or by judgments made regarding obviously sex-typed first names; in the

case of multiple authors when one author's sex was unknown, the article was classified by the sex of the other authors.

The article rather than the author was selected as the unit of analysis to avoid distorting the interpretation of results that might arise from multiply-authored publications. We wished to avoid equating one article having five male authors with five articles, each having one female author.

Results

A total of 972 research articles were published between 1973-1977 in the four journals examined. An additional 143 research articles were published in the fourteen issues of Sex Roles and in the eight issues of Psychology of Women Quarterly that were available for analysis, and another 253 research articles were published in the twenty issues of the Journal of Negro Education and in the six issues of Bilingual Review available to us.

Articles Dealing with Women in Education

The number and percentage of published articles dealing with women and education, by journal, for the five-year period 1973-77 appear in Table 1. Overall, fewer than 10% of all articles published by the major education journals during this time dealt with women in education. By comparison, 24% of the articles published in the women's research journals dealt with education, whereas only 6% of the articles published in the minority education

Insert Table 1 about here

journals dealt with women. The American Educational Research Journal and the Journal of Educational Psychology published twice as many articles on

women in education as did Sociology of Education or the Journal of Educational Measurement.

Articles Having Women Authors or Coauthors

Overall, Table 1 shows that 9.3% of the articles in the four major journals were authored solely by women, and another 21.7% were coauthored by men and women, leaving 76% of the articles authored solely by men (the sex of the author(s) was unknown for 3% of the articles). In the comparison women's journals, 58.7% of the articles were authored solely by women, and another 26.6% were coauthored by men and women, leaving only 14% authored solely by men. In the comparison minority journals, however, women authored only 17.4% of the articles solely and only 7.9% of the articles with male coauthors; men authored over 64% of all the articles in the minority journals.

Change in Numbers of Articles Dealing with Women and Education from 1973-1977

In the four major journals, while the percentage of articles on women

Insert Table 2 about here

and education changed from a low of 4.7% in 1973 to a high of 12.9% in 1977, a one-way analysis of variance on the percentage of articles dealing with women in education for all five years failed to indicate any significant differences by year, $F(4, 15) = 2.3126$, n.s.

A multiple contingency table analysis (Bishop, Fienberg & Holland, 1975) was undertaken using the computer program LOGLIN of the Harvard School of Public Health to examine the simultaneous effects of year and journal on article topic. For this analysis, two topic categories were

used: (1) articles on women and education, and (2) articles on other topics. The likelihood ratio chi-square test for a constant proportion across all journals and years (likelihood ratio (19) = 24.92, $p > .15$) provided little evidence that the proportion of articles dealing with women and education varied from year to year or from journal to journal. Thus, although it appears in Table 2 that a somewhat higher proportion of the articles published in American Educational Research Journal and in the Journal of Educational Psychology focused on women and education than did the articles published in the Journal of Educational Measurement and in Sociology of Education, no statistical evidence in support of this claim was found.

Change in Authorship of Total Articles from 1973 to 1977

The percentage of all articles authored solely by women varied from a low of 3.8% in 1974 to a high of 9.9% in 1973 (Table 3). A one-way analysis of variance for all five years (1973-1977) indicated no

Insert Table 3 about here

statistically significant differences by year, $F(4, 15) = .9546$, n.s.

The percentage of articles coauthored by women and men ranged from a low 18.2% in 1973 to a high of 22.7% in 1976 (Table 3). An analysis of variance on the percentage of articles coauthored by women and men for all five years (1973-1977) indicated no statistically significant differences by years, $F(4, 15) = .2491$, n.s.

A multiple contingency table analysis was also undertaken to examine the simultaneous effects of year and journal on sex of authorship. In this analysis, three categories of author type were used: (1) female

only, (2) female and male coauthors and (3) other, including unknown. The likelihood ratio chi-square test for a constant proportion across all journals and years showed that the distribution of the sex of authors varied by journal (likelihood ratio (6) = 23.74, $p < .001$) but did not change much over time (likelihood ratio (8) = 5.58, $p > .50$). The American Educational Research Journal and the Journal of Educational Psychology were twice as likely to publish articles authored or coauthored by women as were the Journal of Educational Measurement and Sociology of Education, regardless of year.

In any one year of this five-year period the mean percent of articles across all journals with women as sole authors and coauthors never exceeded 32%, whereas the mean percent of articles with men as sole authors and coauthors was never less than 90%. Articles with men and women coauthors are counted twice in this computation.

Authorship of Articles on Women in Education

After having identified the articles in major journals dealing with women in education from the computer and hand searches, the authorship of the articles on women and education was examined specifically to determine whether women were publishing more about women in education than men were publishing.

Insert Table 4 about here

Table 4 presents the percentage of articles authored solely by women, coauthored by women and men, and authored solely by men for articles on women and education as compared with articles on other topics.

Overall, it is evident that the authorship of articles on women in education did not favor women over men. Articles on women and education were nearly three times more likely to be authored solely by men than solely by women. Furthermore, more than 50% of the articles on women and education (as well as on other topics) were authored solely by men.

Comparing Table 1 with Table 4, however, we note that although 76% of all articles published in the major journals between 1973 and 1977 were solely authored by men, only 55% of the articles on women in education were solely authored by men. Simply comparing the two tables is misleading, however, because the women in education articles are included in all the articles.

Table 4 separates articles on women and education from articles on other topics. An analysis of individual journals was not possible because of the size of the sample, but, over the total of all journals and all years, there was a significant difference on the content of articles authored by women, coauthored by women and men, and authored by men, $\chi^2(2) = 10.768$, $p < .01$. Two conclusions may be drawn from this analysis.

First, articles published by women were more likely to focus on women in education (as opposed to other topics) than would be expected (17 articles observed as compared with 8.6 articles expected).

Second, articles published by men were less likely to focus on women in education (as opposed to other topics) than would be expected (51 articles observed as compared with 59.5 articles expected).

Summary and Discussion

In this paper we have examined the content and authorship patterns of articles published in major education, women's and minority journals from 1973 through 1977, a time during which feminism was presumed to affect both law and practice in education. Our research, however, suggests that the impact of women's concerns in education was not nearly so great as imagined. In particular, we failed to find evidence of any impact on educational publications. Our findings can be summarized briefly:

1. There were very few articles related to women and education published between 1973 and 1977.
2. There was no increase in the absolute or relative number of articles related to women and education between 1973 and 1977.
3. Few articles were either authored or coauthored by women.
4. No increase in the absolute or relative number of articles authored or coauthored by women was observed.
5. Women were more likely to be authors of articles on women and education than on other topics, but
6. Twice as many published articles on women and education were authored by men as were authored by women.
7. In the comparison journals specifically concerned with women's issues (but not limited to education), there were almost twice as many articles on women and education as appeared in the major educational journals, and
8. In the comparison journals specifically concerned with minority education, there were fewer articles on women and education than in the major journals.

Overall, there appeared to be a large number of articles written on women and education, but comparatively few of these articles received publication in major journals. It is surprising that so few articles on the topic appeared, since the definition of "women and education" used in this paper was sufficiently broad to include any article that focused on education and used female subjects. With girls comprising 50% of the population of elementary and secondary schools and women comprising 85% of elementary teachers and 50% of secondary teachers, we might have expected between 50% to 100% of the journal articles in education to fall under the rubric of women and education.

It is also surprising—given the infrequency in 1973 of both articles focused on women in education and articles authored by women, and given the increase in both the support for research on women and the number of doctorates awarded to women educational researchers since 1973—that no increase in published articles concerning women and education or authored by women was observed.

Despite such evidence as new social science journals related to women and special "women's" issues of old journals, the topic of women and education had apparently not, as of 1978, become legitimate for scholarly reporting in mainstream education journals. Nor had the academic status of women improved, if such status is accurately reflected by publications.

Since prestigious mentorships and prestigious academic affiliation have direct consequences on publications (Long, 1978), if prominent men mentored more women, we would expect to see an increase in the proportion of coauthored articles. Similarly, if more women obtained prestigious

positions, we would expect to see an increase in articles authored by women. Seeing neither, we infer that women's academic status did not improve during this time.

Instead of evidence of improved status, we found evidence of ghettoization. Thus, we found that women published more in "women's" journals and that women who published in mainstream journals wrote a greater proportion of their articles on women and education than on other topics. This ghettoization may be due to women researcher's relatively greater interest in other women as subjects of investigation, or it may be due to beliefs that women have greater competencies than men vis-à-vis women and education and that these beliefs enhanced their likelihood of having an article on this topic accepted for publication (Lockheed & Hall, 1976).

Whatever the reason for it, there are drawbacks associated with ghettoization. Ghettoization of research on women and education may limit its visibility or restrict its visibility to those already interested in or knowledgeable about the topic, rather than allowing the research to inform a wider, possibly less receptive, audience. There is evidence, however, that research published in women's journals is far from invisible. According to The Journal Citations Index, Sex Roles (1977), for example, was ranked 287 out of 1285 journals in terms of citation impact (# of citations ÷ # of citable items); by comparison, American Educational Research Journal was ranked 115, Sociology of Education was ranked 863, Journal of Education Psychology was ranked 112, and Journal of Educational Measurement was ranked 261, Garfield (1978). We may conclude from this that the articles published in one women's journal, at least, are fairly visible.

We do not know, however, whether the articles in women's journals are widely read by those not doing research in this area. If the goal of conducting research on women in education is to impact upon all areas of education, the research must be incorporated into mainstream journals so that it is read by those in traditional areas of specialization. A drawback to publishing in women's journals, therefore, is that the impact may be limited to "true believers" rather than to potential "converts."

A second drawback to ghettoization is that to the authors. If any component of promotability is contingent upon an individual's productivity as evidenced by high status publications, publishing in lower status journals may restrict promotability. This is not to say that women's journals are necessarily lower status. However, since past practice indicates that academic departments tend to accord highest status to journals that publish articles in the department's field, and since most researchers on women and education are not employed in women's studies departments, women's studies journals may have less relative prestige in these departments. The productivity of authors whose work is published in women's journals may, therefore, be devalued.

This is not to argue, however, that, women's journals serve no function. One major function is that of providing a journal centered on one specific research area (i.e., - Psychology of Women Quarterly, Sex Roles) through which researchers can share their findings. Such a journal (or special issue) provides a major single source of current research on women.

Another important contribution of women's journals is to legitimize the field of women's studies (Wallston, 1979). Be encouraging and

publishing rigorous scientific studies within and across discipline lines, women's journals provide a research base for the field.

A third role for women's journals may be to support and nurture new authors. Women who are not yet familiar with the publication process or who are intimidated by the reputation of mainstream journals may be more willing to submit a paper on women's research to a women's journal. They can be assured that the topic of their research will be taken seriously, and that the paper will be judged on its other merits.

By 1978, however, the benefits of such ghettoization had not outweighed its costs, and we observed little evidence that women in educational research improved their status from 1973. Organizations concerned about increasing the number and status of women in the professions should not assume that providing research monies will directly benefit women researchers, although, indeed, such funding may aid in the understanding of the problem and in the identification of effective programs. We have demonstrated that research and program money has been available, but that it is not instrumental in the improvement of women's status, at least as such status is reflected in publications. If women's advancement is the objective, paths of assistance more direct than the funding of research and development on women and education are needed. Perhaps assuring women's positions in the present structures of prestigious doctoral programs and mentorships may be effective, or perhaps entirely new structures may be required.

REFERENCES NOTES

1. Stein, S. L., & Weston, L. C. An analysis of empirical research reports in the American Educational Research Journal, 1972-1977.
Paper presented at the meeting of the Eastern Educational Research Association, Williamsburg, Va., March 7, 1978.
2. Persell, C. H. Rewards and research: A comparison of male and female researchers. Paper presented at the meeting of the American Educational Research Association, Toronto, Canada, March 27-31, 1978.
3. Brody, I. M., & Kruse, J. K. Differential evaluation processes, by gender in organizational settings. Paper presented at the meeting of the Pacific Sociological Association, Spokane, Washington, April, 1978.
4. Women's Equity Action League. Women graduates: A statistical survey of the women earning degrees in higher education in the United States. Unpublished manuscript, 1975. (Available from the WEAL Educational and Legal Defense Fund, 823 National Press Building, Washington, D.C., 20045.)

REFERENCES

- AERA Annual Report, 1976-77. Educational Researcher, 6(7), 18-25,
(July/August) 1977.
- AERA Annual Report, 1977-78. Educational Researcher, 7(7), 18-25
(July/August) 1978.
- Availability data: Minorities and women. Washington, D.C.: Department
of Health, Education and Welfare, 1978.
- Babladelis, G. Quarterly report. Division 35 Psychology of Women
Newsletter, April 1978, p. 4.
- Baye, A. E., & Astin, H. S. Sex differentials in the academic reward
system. Science, 1975, 188(23), 796-802.
- Bishop, Y., Fienberg, S., & Holland, P. W. Discrete multivariate analysis:
Theory and practice. Cambridge, Mass.: M.I.T. Press, 1975.
- Blackburn, B. T., Behymer, C. E., & Hall, D. E. Research note: Correlates
of faculty publications. Sociology of Education, 1978, 51, 132-141.
- Centra, J. Women, men and the doctorate. Princeton, N.J.: Educational
Testing Service, 1974.
- Cook-Freeman, B. Faculty women in the American university: Up the down
staircase. Higher Education, 1977, 6, 165-188.
- Entwistle, D. Report of the editor of Sociology of Education. ASA
Footnotes, March 1978, p. 10.
- Fillos, R., & Bailey, W. Superintendents and educational research.
Phi Delta Kappan, October 1978, 135-136.
- Fishel, A., & Pottker, J. National politics and sex discrimination in
education. Lexington, Mass.: Lexington Books, 1977.

REFERENCES (continued)

- Focus on Women, United States Department of Health, Education and Welfare, Washington, DC: 1975.
- Garfield, E., (Ed.). SSCI Journal Citation Reports, Volume 6. Philadelphia: Institute for Scientific Information, 1978.
- Garvey, W. D., Nelson, C., & Lin, N. A preliminary description of scientific information exchange in education research. In Dershimer, R. D. (Ed.), The educational research community: Communication and social structure. Washington, D.C.: American Education Research Association, 1970.
- Hohn, R. L., & Fine, M. J. Ratings and misratings: A reply to Mace and Warner. American Psychologist, 1973, 28, 1012.
- Koulack, D., & Kesselman, H. J. Ratings of psychology journals by members of the American Psychological Association. American Psychologist, 1975, 30, 1049-53.
- Lipman-Bluman, J., Stivers, P. E., Tickamyer, A. R., & Brainard, S. Participation of women in the educational research community. Educational Researcher, 1975, 4(9), 5-14.
- Lockheed, M. E., & Hall, K. P. Conceptualizing sex as a status characteristic: Applications to leadership training strategies. Journal of Social Issues, 1976, 32(3), 111-124.
- Long, J. S. Productivity and academic position in the scientific career. American Sociological Review, 1978, 43, 889-908.
- Luce, T., & Johnson, D. Ratings of educational and psychological journals. Educational Researcher, November 1978, 8-10.

REFERENCES (continued)

- Mace, K. C., & Warner, H. D. Ratings of psychology journals. American Psychologist, 1973, 28, 184-86.
- Prescott, S. Why researchers don't study women: The responses of 62 researchers. Sex Roles, 1978, 4(6), 899-905.
- Reardon, P., & Prescott, S. Sex as reported in a recent sample of psychological research. Psychology of Women Quarterly, 1977, 2(2), 157-161.
- Reskin, B. Sex differences in status attainment in science: The case of the postdoctoral fellowship. American Sociological Review, 1976, 41(4), 597-612.
- Seaton, H. W. Education journals: Publication lags and acceptance rates. Educational Researcher, 1975, 4(4), 18-19.
- Tittle, C. K., Saario, T. N., & Denker, E. R. Women in educational research: Their status from student to employee. Educational Researcher, 1975, 4(9), 15-24.
- U.S. Department of Health, Education and Welfare. Resources in Women's Educational Equity, Volume 1. Washington, D.C.: U.S. Government Printing Office, 1976.
- U.S. Department of Health, Education and Welfare. Resources in Women's Educational Equity, Volume 2. Washington, D.C.: U.S. Government Printing Office, 1978.
- United States Office of Education, Budget Presentations, 1978.
- Wallston, B. S. Publishing research on psychology of women. Division 35 Newsletter, Psychology of Women Quarterly, 6(2), 1, April 1979.

Footnotes

The authors wish to express their appreciation to Eleanor Horne and Barbara Hunt for the computer-based literature search; to Paul Holland for the multiple contingency table analysis; and to Charles Haughey, Susan Sherwin, Cheryl Weiner, and Louise Weston for reading and commenting on an earlier draft of this paper.

TABLE 1: Articles Published in Education Journals, 1973-1977

	<u>Total</u>	<u>Dealing with Woman and Education</u>	<u>With Female Authors</u>	<u>With Male and Female Authors</u>	<u>With Male Authors</u>	<u>Sex of Author Unknown</u>
<u>American Educational Research Journal</u> 1973-1977 (20 issues)	105	10 (9.5%)	11 (10.5%)	27 (25.7%)	62 (59.0%)	4 (3.8%)
<u>Journal of Educational Measurement</u> 1973-1977 (20 issues)	155	8 (5.2%)	6 (3.9%)	24 (15.5%)	124 (80.0%)	1 (0.6%)
<u>Journal of Educational Psychology</u> 1973-1977 (30 issues)	574	66 (11.5%)	65 (11.3%)	139 (24.2%)	348 (60.6%)	22 (3.8%)
<u>Sociology of Education</u> 1973-1977 (20 issues)	138	8 (5.8%)	9 (6.5%)	21 (15.2%)	106 (76.8%)	2 (1.4%)
<u>Psychology of Women Quarterly</u> 1976-1978 (8 issues)	40	19 (47.5%)	32 (80.0%)	5 (12.0%)	3 (8.0%)	0 (0.0%)
<u>Sex Roles</u> 1975-1977 (14 issues)	103	16 (15.5%)	52 (50.0%)	33 (32.0%)	17 (17.0%)	1 (1.0%)
<u>Bilingual Review</u> 1974-1975 (6 issues)	25	0 (0.0%)	8 (32.0%)	0 (0.0%)	14 (56.0%)	3 (12.0%)
<u>Journal of Negro Education</u> 1973-1977 (20 issues)	228	15 (6.6%)	36 (16.0%)	20 (9.0%)	148 (65.0%)	24 (11.0%)

TABLE 2

Percentage of Total Articles
Related to Women and Education, by Journal and Year
(Total articles on all topics in parentheses)

	Year				
	1973	1974	1975	1976	1977
<u>American Educational Research Journal</u>	0 % (16)	11.8% (17)	8.7% (23)	11.8% (17)	12.5% (32)
<u>Journal of Educational Measurement</u>	2.8% (36)	8.1% (37)	7.1% (28)	0 % (25)	6.9% (29)
<u>Journal of Educational Psychology</u>	9.4% (107)	12.2% (131)	10.9% (128)	8.2% (110)	17.4% (98)
<u>Sociology of Education</u>	6.5% (31)	3.6% (28)	3.6% (28)	3.2% (31)	15.0% (20)
<u>Total (all journals)</u>	4.7% (190)	8.9% (213)	7.6% (207)	5.8% (183)	12.9% (179)

TABLE 3
 Percentage of Total Articles
 Authored or Coauthored by Women, by Journal and Year^a

	Year				
	1973	1974	1975	1976	1977
<u>American Educational Research Journal</u>					
Women only authors	12.5%	0.0%	0.0%	23.5%	15.6%
Women & men co-authors	18.8%	35.3%	17.4%	23.5%	31.3%
<u>Journal of Educational Measurement</u>					
Women only authors	5.6%	5.4%	3.6%	0.0%	3.5%
Women & men co-authors	16.7%	10.8%	10.7%	28.0%	13.8%
<u>Journal of Educational Psychology</u>					
Women only authors	8.4%	9.9%	11.7%	11.8%	15.3%
Women & men co-authors	24.3%	21.4%	29.7%	20.0%	25.5%
<u>Sociology of Education</u>					
Women only authors	12.9%	0.0%	3.6%	12.9%	0.0%
Women & men co-authors	12.9%	17.9%	21.4%	9.7%	15.0%
<u>Average of percents (all journals)</u>					
Women only authors	9.9%	3.8%	4.7%	12.1%	8.6%
Women & men co-authors	18.2%	21.3%	19.8%	20.3%	21.3%

^aSee Table 2 for total number of articles published by journal by year

TABLE 4

Authorship of Articles on Women and Education
Compared with Authorship of Articles on Other Topics,
In the Four Major Journals, 1973-1977

	Female Author(s)	Male & Female Co-authors	Male Author(s)	Sex of Author Unknown
<u>American Educational Research Journal</u>				
Women & Education Topic (N=10)	3 (30.0%)	3 (30.0%)	3 (30.0%)	1 (10.0%)
Other Topic (N=95)	8 (8.4%)	24 (25.3%)	59 (62.1%)	3 (3.2%)
<u>Journal of Educational Measurement</u>				
Women & Education Topic (N=8)	1 (12.5%)	1 (12.5%)	6 (75.0%)	0
Other Topic (N=147)	5 (3.4%)	23 (15.6%)	118 (80.3%)	1 (0.7%)
<u>Journal of Educational Psychology</u>				
Women & Education Topic (N=66)	12 (18.2%)	14 (21.2%)	38 (57.6%)	2 (3.0%)
Other Topic (N=508)	53 (10.4%)	125 (24.6%)	310 (61.0%)	20 (3.9%)
<u>Sociology of Education</u>				
Women & Education Topic (N=8)	1 (12.5%)	3 (37.5%)	4 (50.0%)	0 (0.0%)
Other Topic (N=130)	8 (6.2%)	18 (13.8%)	102 (78.5%)	2 (1.5%)
<u>Total</u>				
Women & Education Topic (N=92)	17 (18.5%)	21 (22.8%)	51 (55.4%)	3 (3.3%)
Other Topic (N=879)	74 (8.4%)	190 (21.6%)	589 (67.0%)	26 (3.0%)